# BatteryWidgetSmartFns

This object is the heart of the Smart Battery Widget application.

The class BatteryWidgetSmartFns updates the batter statistics and also updates a file of battery data.

At the start of the day, BatteryMinuteData updates the battery time predictions after smoothing the data. The predictions are basically the expected value for the time the phone will be in a battery level band before transitioning to the next lower band.

BatterySummaryLevelData computes the discharge or recharge time for each battery level, updated each minute.

ComputeTime and ComputeTimeData are utility classes to perform the computations.

BatteryFile and BatteryFileData are utility classes to store the log data.

Every minute the display is updated with the input power source (if any) and the battery level and discharge time. The battery level is also displayed as a picture.